

ESTABLISHED 1848

RURAL  
WORLD

COLMAN'S RURAL WORLD.

DEVOTED TO

AGRICULTURE

HORTICULTURE

HORSES

CATTLE

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SWINE

ETC.

Established 1848.

## COLMAN'S RURAL WORLD

NORMAN J. COLMAN, EDITOR.  
LEVI CHURBUCK,

Published every Wednesday, in Chemical building, corner of Eighth and Olive streets, St. Louis, Mo., at one dollar per year. Eastern office, Chalmers D. Colman, 420 Temple Court, New York City. Advertisers will find the RURAL WORLD the best advertising medium of its class in the United States. Address all letters to COLMAN'S RURAL WORLD, Chemical Building, St. Louis, Mo.

While the RURAL WORLD is published at one dollar a year, it has temporarily allowed old subscribers to send actually NEW OR TRIAL subscribers with their own subscriptions at fifty cents a year, in order to largely increase the circulation and influence of the paper. This price is less than the cost of the white paper, presswork, folding, wrapping, mailing and greasing the postage, saying nothing of any other of the large expenses of maintaining offices, paying salaries and conducting such a paper in a large city. Renewals, unless accompanied by one or more NEW subscribers must be at one dollar a year. All names are dropped as soon as subscriptions expire. The month named on the address tag, pasted on each issue, shows the monthly subscriptions expire, and renewals should be made two or three weeks before, so that names shall not drop out of list. It is gratifying to the proprietor to be able to state, in his half century's experience in conducting this paper, it has never enjoyed the patronage and prosperity it now does. Its circulation is increasing in a wonderful degree, and its advertising patrons, many of whom have used its columns for a quarter or a third of a century, are more than pleased with results. Let all our friends unite and press forward in extending its sphere of influence. It will do for others what it is doing for you, so get others to join the great RURAL WORLD army and receive the same benefit.

The Department of Agriculture at Washington is to have a new building, our Washington correspondent tells us. We are glad to know this. Those of our readers who have visited the capital city and noted how the Department of Agriculture is housed, compared with the provisions made with other governmental departments, will readily admit that it is high time that this department should be provided with a building suitable in size and appointments to its needs.

A TENNESSEE "TEST ACRE."

We are pleased to know of our Tennessee correspondent's determination to have a "test acre," as mentioned on this page. As to how to manage it, local conditions can best determine. Testing seed from different latitudes will be interesting and valuable, although that is work which would be better undertaken by experiment stations, because it will take a number of trials and seasons to determine the point satisfactorily.

Were we to manage a "test acre," we would confine the effort at first largely to tests of culture and of fertilizers, to determine which were best suited to our soil and climate. These tests would involve fundamental principles in agriculture, and when the points are determined for various crops, one has acquired, to a considerable extent, a mastery of farming problems. Big and profitable crops depend very largely on one's knowing what and how to feed them, and how to cultivate the soil so the plants can best get their food.

Let us hear from others who will plant "test acres."

## FARMERS WERE HONORED.

Among this week's "Pebbles from the Potomac" is one in which the American farmer should be particularly interested. An honored guest of the President at the recent inaugural was the man who runs the President's farm. This farm of 162 acres is no larger than thousands upon thousands of American farmers possess—about an average sized farm—and, judging by the stock kept, is run on the mixed farming plan, as are the vast majority of our farms.

Doubtless "Uncle Jack" is a pretty good sort of "renter"—but we do not doubt that there are many "renters" among the RURAL WORLD readers who would run the McKinley farm just as well and successfully as he does. But it is pleasing to think that the President of the United States owns a quarter-section farm in which he has a lively interest, and that he has so much regard for "Uncle Jack," his "renter," that this worthy person is invited to the White House on an occasion of surpassing splendor. Through "Uncle Jack" Adams the American farmers have been honored.

## SAVE THE FORESTS.

The statements made by Mr. D. C. Burson in this and last week's issues of the RURAL WORLD relative to cultivating forest trees, should be thoughtfully considered. True, planting and cultivating forest trees is not a "get-rich-quick" way of making money, but there is little doubt as to the certainty of the profits from it.

The last point made by Mr. Burson is one of the strongest. "One-fourth of the land kept covered with a growth of forest trees, the other three-fourths would raise more stock, grains, fruit and vegetables than could possibly be raised on the entire land were it all clear of trees."

The destruction of our native forests has been and is still being recklessly carried on. The Division of Forestry of the U. S. Department of Agriculture will do the nation incalculable service if it succeeds in arresting the wanton destruction and awakening an interest in forest tree planting.

We have before us a communication from California relative to what unrestrained human greed is doing in the Redwood groves of California. Those "Big Trees" of the Sierra Nevada are the oldest of living things—older than the pyramids of Egypt—4,000 years old at the beginning of the Christian era—standing 400 feet high and with a base circumference of 100 feet—and are in danger of destruction.

## THE DAIRY INDUSTRY RECOGNIZED

We are pleased to note that the 41st General Assembly of Missouri, which has just adjourned, gave the dairy industry very substantial recognition. It refused to consider a bill that was slipped in which was intended to make easier the fraudulent selling of imitation butter. On the other hand, a bill was passed which amended the anticolor oleo law and will greatly aid the Board of Agriculture in enforcing the law.

Leibig, who was born in 1803, the year the Louisiana Purchase became United States territory, is justly called the father of modern agriculture; for it was his researches in organic chemistry and the application of this to agriculture about 1840 that gave this most important of the world's industries a new birth. Following rapidly after came the development of other sciences—botany, entomology, bacteriology, physics—and their application to the practical operations of the farm.

Liebig's work has been recognized by the farmers' institutes, organized now over a year ago, through the enthusiastic efforts of the Hon. Mr. Rosamann of West Tennessee, is getting in some good work. Farmers are beginning to learn the necessity of better and more thorough methods of farm work. Diversified farming is also telling its advantageous story. These two ideas introduced and practiced by the farmers of our county, inspire hope, confidence and buoyancy of spirits that were absent but a few years ago.

Nor are these conditions among farmers of our country without adequate cause. All now see (and seeing is believing) that the improved methods of farm work pay. Herdsmen here the propelling power of the great wheel which our Farmers' Institutes have seen in motion. We may well thank our State Legislature for appropriating \$5,000 to be used in organizing Farmers' Institutes, and also to the Hon. Thomas H. Paine, our Commissioner of Agriculture, for his efficient work.

Provision was also made by appropriating \$40,000 for the erection and equipment of the Agricultural College farm of a dairy and live stock building. This building is to be equipped with a complete outfit of butter and cheese making apparatus and all facilities for instruction in up-to-date dairying.

And last, but by no means least, the suggestion of the Missouri Dairy Association was acceded to and a bill passed directing the Board of Curators of the State University to establish in the Agricultural College a Chair of Dairy Husbandry. The bill carried an appropriation of \$5,000 for the next biennial period.

The appointees to this chair, by the terms of the law, is not only to teach dairying to the students of the Agricultural College, but, first of all, is instructed by lectures in various parts of the state, at farmers' institutes, through the press and in bulletins, to do what he can to develop the dairy industry of the state.

This is what the Dairy Association has been trying to bring about since its organization ten years ago. To some of its members the fulfillment of their hopes in this direction has seemed to be long deferred; but even a decade of hard, persistent work was well spent with the accomplishment of this result. A new era has dawned to the dairy industry of Missouri, and the coming decade will see a growth at its close which will seem marvelous. The dairymen of Missouri should bear in grateful remembrance the first General Assembly.

## MISSOURI FARMERS' INSTITUTE.

The Missouri State Board of Agriculture is holding a series of farmers' institutes in the western part of the state, representing, we presume, the series held last summer. The RURAL WORLD has not been informed by the secretary of the board as to how many institutes are to be held, or where and when. From a reader, Sidney D. Frost, of Caldwell County, we receive the following report of the institute held March 11, at Mifflin, Mo.:

On last Monday Mirabile held her first Farmers' Institute. About 150 representative farmers were present and a very profitable and enjoyable meeting was had.

The following program was given at the afternoon and night sessions:

"Benefit of Farmers' Institutes," by G. W. Waters of Canton, Mo.

"Sheep Husbandry," by James Elliott, Mirabile, Mo., discussion of same by J. R. Sprague, Charles Jones and others.

"Cattle Feeding," by J. R. Paxton, discussion of same led by Col. G. W. Waters.

"Cheese Making and Dairying," composed by G. A. Umstot.

Col. Waters also made short talks on How to Preserve the Fertility of the Soil, and The Economy of Balanced Rations for all Kinds of Stock. He quoted from experimental tests to prove his argument and made a thoroughly instructive talk.

The meeting was held under the auspices of the State Board of Agriculture.

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## The Dairy

### RECOGNITION OF THE DAIRY INDUSTRY.

Mr. Ed. Hosmer presents on this page, in a striking way, some facts that should awaken thought. While conceding that the appropriation of money by the State to the State Horticultural Society (about \$4,000 a year) has been given the society for 15 years or more, to expend in advancing the fruit industry, has been money well spent, and that the Horticultural Department of the State Agricultural College with its chair of Horticulture and equipment for instruction in this line of work have done efficient work, we contend that money and effort spent in the interest of dairying would have done equally as much good; that if half as much money and effort had been spent in advancing the dairy industry it would in ten years' time have added \$10,000,000 annually to the income of the farmers of Missouri. We are proud of the reputation that has been won for Missouri as the land of the Big Red Apple, and trust this will be maintained; but we do not know any good reason why the dairy industry should have been compelled to wait for recognition. The Missouri Dairy Association has been in existence for 10 years, trying to advance the dairy industry, to do for it what the Horticultural Society has been doing for the fruit industry, but without any aid or recognition from the state.

But we are glad to note the fact that there is not so strong an inclination now to say that "the dairy industry can afford to wait." The new secretary of the State Board of Agriculture, Mr. Ellis, is giving attention to this line of agriculture. The board is co-operating with the Dairy Association, and is now having printed in pamphlet form the proceedings of the last annual dairy convention. It will also give more prominence to dairying in the farmers' institute work than in the past.

We think President Jess of the State University will soon abandon, if he has not already abandoned, the waiting policy with reference to the dairy industry, and see to it that the Agricultural College is equipped with a chair of Dairy Husbandry. True, the dairymen of the State were obliged to ask the Legislature to pass a bill requiring the Board of Curators of the State University to create such a chair and appropriate money with which to pay the salary of the professor, and at this writing the bill to that effect introduced in the House of Representatives by Judge Hawkins, of Marion County, has passed the House, and we hope by the time this issue of the RURAL WORLD reaches our readers the bill will have become a law; also that the College of Agriculture will have been given the \$10,000 asked for with which to erect and equip a dairy building.

With the college thus equipped, and ready to give instruction in dairying, and the Board of Agriculture recognizing the importance of the dairy industry and aiding in its development through farmers' institutes and by a rigid enforcement of the anti-color law, it is "up to" the dairymen to do their part in pushing forward the business.

One way in which they can materially aid in putting the dairy industry rapidly to the front is to do just what Mr. Hosmer has done—tell what they are doing through the RURAL WORLD. As Secretary Ellis remarked in our February 27 issue, "God helps those who help themselves." All that the Board of Agriculture, the Agricultural College, the Legislature, the RURAL WORLD and all other agencies can do will have no effect in building up the dairy industry unless the dairymen help themselves by making use of these agencies. Let us hear from you as to your successes, that these may encourage others; and as to your failures, that way to overcome may be pointed out.

We are pleased to state that at the present time there is a class of 20 young men at the Missouri Agricultural College studying dairying. The number should be five times as great, and will be as soon as the college is prepared with proper buildings and equipment to give instruction equal to that given in Iowa, Wisconsin, Minnesota and other states. When this condition is attained, sons of Missouri farmers will not, as has been the case in many instances, go to other states for instruction in dairying; neither will it be necessary then, as it is now, to send to Iowa and Illinois for a large part of the butter consumed in St. Louis and other Missouri markets.

**THE DAIRY INDUSTRY SHOULD HAVE RECOGNITION BY THE STATE.**

Editor RURAL WORLD: With February ends our seventh year in the dairy business.

Sales the past year.....\$7,563.47  
Increase of stock.....150.00

Expenses.....\$7,712.47  
Profits.....\$1,067.22

Over \$7,000 of the sales were the products of our dairy—hogs, butter and veal calves. We include hogs because they were so largely fed on skim milk.

The expense account needs explanation. We built quarters for two families and

## There Are 2400

Disorders incident to the human frame, of which a majority are caused or promoted by impure blood.

The remedy is simple.

Take Hood's Sarsaparilla.

That this medicine radically and effectively purifies the blood is known to every druggist, known to hundreds of thousands of people who themselves or by their friends have experienced its curative powers.

The worst cases of scrofula, the most agonizing sufferings from salt rheum and other virulent blood diseases, are conquered by it, while those cured of boils, pimples, dyspeptic and bilious symptoms and that tired feeling are numbered by millions.

**Hood's Sarsaparilla**  
Will do you good. Begin to take it today.



RURAL WORLD

**TIMBELL 2D, AND HER TWIN CALVES, TIM AND BELL.**

"BUFF JERSEY" sent the photograph from which the engraving presented on this page was made. He says: "Timbell 2d, is a very superior heifer. She produced as two-year-old 284 pounds of butter in ten months. The photograph was

taken when the calves were three days old, which was on February 6. The calves are being hand raised and are growing finely. They have been named Tim and Bell. The heifer, according to the fogey dairymen of prehistoric times, will not breed. We will see later."

enlarged our milking barn from 70x60 to 114x60 feet, adding 42 Hoard's model stalls. We have used only 14 of the new stalls this winter, milking constantly 70 cows. We hope to fill up another year to the full capacity of the barn—96 head. The milking is done in a rock basement which has 30 openings. Windows are eight light, glass 10x12 inches. Nearly two carloads of cement were used in concreting the floors.

Another thing that adds to our expense account is my age. I was born in 1872. The past season I went into the hay field with an umbrella to screen me from the sun. In former years I took a fork and made a hand. Should we add to net profits, as given, cost of enlarging barn, houses for help, and living expenses, it would show that the farm has cleared over \$3,500 during the last year.

Some years ago at a farmers' institute held in this county, I was introduced as a dairymen to President Jess of our State University. He remarked that he thought horticulture ought to be pushed in Missouri; that the dairy industry could afford to wait. I didn't feel competent to discuss the question with so able a person, but the thought occurred to me that Dr. Jess traveled with tree men, men paid by the state to wake up an interest in horticulture, and that he had imbued all of their enthusiasm. Apple raising has been pushed for the past 30 years in Webster County. Let us compare this industry with the dairy business. Last fall we had a very fine apple crop, nearly an average one. Webster County has 20,000 acres devoted to apple orchards. Dr. James, secretary of the County Horticultural Society, thinks we have 30,000 acres tributary to Marshfield as a shipping point. Our local papers give 65 cars as the amount of apples shipped from this station. At 25 cents per bushel, three bushels per barrel, and 200 barrels per car, we find the apple crop on these 10,000 acres have a value of \$8,250, or 82¢ cents per acre. Our little dairy farm turned out over \$25 per acre. We only had under cultivation last year 300 acres. This will be increased by clearing timber land during the winter to 325 acres.

Webster Co., Mo.  
**ED. HOSMER.**  
ONE SCRUB COW.

Editor RURAL WORLD: I am a young man and farm in a small way. We keep but one scrub cow and feed her turnips, cow peat hay, crushed corn, wheat bran and corn fodder. Besides this she has a large straw pile to run to at will. We are six in family, and have two boarders, always have milk and butter on table, and my wife has sold some butter. Having no sale for it, the surplus milk is given to the pigs.

E. H. ALLEN.  
Ossage Co., Mo.

A SUGGESTION.—Our correspondent says he is a young man and farms in a small way. He keeps but one scrub cow, that is evidently well fed, both as to quantity and character, and as a result of this good feeding the cow gives more than enough milk to supply a family of eight with milk and butter, the surplus milk being fed to pigs, there being no other market for it.

Mr. Allen has demonstrated in a general way that a cow can be made to do. A little investigation and thinking will prove him in detail that a good cow gives good returns for care and feed given. If that be true of one cow, why not add to the number and make a business of dairy-ing?

It is about 80 miles from Mr. Allen's home to St. Louis, via Missouri Pacific Railway. There is in St. Louis a good and growing demand for milk and cream, and this will be greatly increased during the next two years. If Mr. A. would interest his neighbors in the project, it would be an easy matter to work into the business of producing milk and cream and shipping to St. Louis. And there are hundreds of other points within a radius of 100 miles from St. Louis at which such a business could be worked up and be made profitable.

We will be glad to aid our readers who may be interested along this line with further suggestions if they wish, and by putting them in touch with dealers.

**IOWA DAIRY DEPARTMENT.**

The Minnesota inspection plan has been adopted permanently by the dairy department of Iowa, says an exchange. The experiment was started last July. One inspector was employed. He has visited 130 creameries. Found many out of date. Showed the managers many valuable pointers, and with the adoption of the new methods much better results have been secured. The department reports that Minnesota is ahead of Iowa on average conditions because so many of the Iowa creameries have been running for years on old methods that are now acknowledged out of date. Minnesota creameries have profited by the Iowa experiments in Northwestern Iowa and have made improvements as fast as they were brought out. The inspector's mission is purely a friendly one. His business is to show farmers and creamery managers the advantage of sanitary arrangements, competent help and improved methods and machinery whereby they may turn out better butter and receive a better return both for their labor and their investment. The inspector is making a detailed re-

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### DAIRY NOTES.

The good cow is a comparatively lean one.

Corn should never be alone fed to the dairy cow.

Breed is well enough, but it will take feed to show what there is in the breed.

In the dairy generally large yields per animal mean a less cost in making them.

The function of milk giving is maternal and the mother needs shelter, warmth and comfort.

The all-the-year-round cow is the paying cow, and the real dairy cows tend in that direction.

Concentrate your efforts on a small area, thus economizing material and stock, as well as labor.

The chief advantages of the creamery system is cheapness of product from the saving of labor.

Good and regular milking is of the utmost importance, as it develops the milk secreting organs.

Moderate exercise is necessary to maintain health and has a stimulating effect on milk production.

One reason why so little is made out of poultry is because so little effort is made to improve the stock.

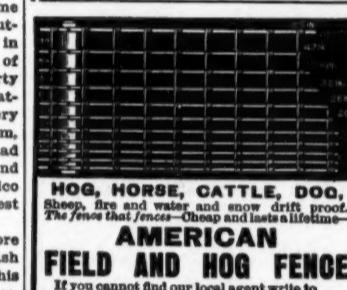
The churn should never be filled more than half full and then if the temperature is right it will churn easily.

It is very important that milk or cream is not exposed to anything which would contaminate it by absorption.

The dairy farmer should own the best land, milk the best cows, hire the best hands and make the best profit.

Winter dairying affords a good opportunity to market all kinds of grain and roughness to a good advantage by feeding to the cows.

Butter will come much quicker sometimes than others, due generally to a difference in temperature; use a good thermometer.



Would you be seeking the best things in traction, portable and semi-portable engines, we have what you want. They are ideal for all kinds of work, from small to large, from dredging, running saw-mills, pumping water anything requiring power. We have them—

From 8 to 20 HP.

They all have small engines, require little fuel, remarkable strength, and are built of the best materials. The Rumely engine has a tensile strength of 60,000 lbs tensile strength steel plate. Make also boxes surrounded with water. Make also Rumely engines and mills.

All fully described in our illustrated catalogue. Ask for it. Mailed free.

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\$25 TO \$50 A WEEK!

The whole weight of the engine is 10 tons. Patent Pending. For Holes and Wires. A man can do three the work with an "IWA" than with others.

Highest award World's Fair, Chicago, 1893. Gold Medal. Highest award, 10 tons, \$5.00. Users value them at \$10,000. Consult hardware dealers, contractors, lumbermen, etc. Send for catalogues.

WANTED Two good farms who can milk single and white, to work on fruit farm, steady employment, pay every month, reference required, address C. B. GREEN, 118 E. 5th street, Sedalia, Mo.

THIS FEED MILL does all kinds of work on one set of gears. It is a simple affair, each horse keeps his own share. No friction. No wear. No noise. The mill is quiet and safe. It is a good mill.

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They are no expense. Thousands are in operation. Specialities given

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Reg. JERSEY CATTLE,

Rare milker, breed to make finest quality butter. First prize World's Fair stock. Two extra young bulls for sale. A Golden Lad herd bull.

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All stock dealers buy.

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BED-WETTING

CURED. Sample FREE!

Dr. F. E. Milne, Binghamton, N.Y.

### "COMMON-SENSE IDEAS FOR DAIRY MEN."

The need of a practical work on dairying from the cow to the finished product has been acknowledged; but the combination to produce an up to date book was not easily found.

A farmer, a dairymen, a butter and cheese maker and a business man would be a happy combination. The author, Geo. H. Blake, has been successful in these lines, and "Common-Sense Ideas for Dairymen" is the result of his long experience. The extent and scope of the work will be better understood by the chapter headings:

Chapter 1. Selection of Dairy Stock.

Chapter 2. Feeding and Care of Dairy Stock.

Chapter 3. Corn and Clover Culture.

Chapter 4. Milk and Cream Testing.

Chapter 5. Care of Milk.

Chapter 6. Buttermakers and butter-making.

Chapter 7. Cheesemaking.

Chapter 8. Creamery Building.

Chapter 9. Farmers Dairy Clubs.

Chapter 10. Miscellaneous Facts.

The story from the beginning to the end is so well told that the reader will hardly give up its reading till he has finished.

Readers of this paper who are interested in dairying will find the practical information in "Common-Sense Ideas for Dairymen" worth many times the small cost. The book is published by the Elgin Dairy Report, Elgin, Ill. Retail price \$1.

**STRONGEST FENCE MADE.**—This is the most prominent claim made for their fence by our advertising patrons, The Coiled Spring Fence Co. of Winchester, Ind. Any man who will read their catalog will not only understand why the claim is made, but will be convinced that it is a fact when he learns that the breaking strain of the fence which we illustrate here is 18,449 pounds. If it were swung across a stream and securely fastened and properly planked, it would sustain without danger practically anything which travels along the public highway. It would appear, therefore, that the claim is not just, but even modest. In addition the meshes are so small as to keep

# Horticulture.

## HORTICULTURAL TALKS.

**DESTROYING THE ENEMY.**—Yesterday I saw the first wasp, but failed to capture it. Every wasp killed is one family less the coming season. Last year wasps destroyed a great part of my raspberry crop, and robbed me of more than half the grapes. They also injured the grapes to some extent. Should they increase much more they will be a menace to much of our fruit.

From present indications we are to have an early spring, and it behoves the horticulturist and gardener to hustle. Have all your tools bright and sharp. Burn all manner of trash, wherein insects may be harboring. Get your sprayers and the ingredients for the work on hand, so as to be ready any time now to use them.

Grafting will be in order soon. There is no doubt but there may be cold weather yet, but it is not likely to be severe enough to hurt the fruit buds. But a late frost after blooming may catch us. For this it is a good plan to have a lot of stuff ready to burn that will make a big smoke. Fire this in the morning, so as to weaken the effect of the sun's first rays. The bright sun shining on a frozen blossom is death to it, while if it can thaw gradually, it may live. Here in our little village, we don't get the sunshine until the sun is an hour high, by which time the temperature of the atmosphere is some degrees higher. But the smoke is not neglected. A dense fog has often saved a crop of fruit. The fruit prospect here is good so far, but this does not insure us a crop. A friend of mine in Hermann got plums by hanging lighted lamps in his trees. When asked what he did it for, he said: "So the boys can see to pick the ripe plums, when they steal them."

**THE EVERBEARING GRAPE.**—A subscriber told me that there is an agent going around selling a vine that will bear all summer. He asked me what I thought of it. The only grape of this kind that I have ever seen or heard of is that of Mr. Allen of Texas. If there is any other, I don't know it. It may be like the strawberry tree, sold around here last year, that turned out to be our common catalpa, nice ornamental shade tree that bears handsome flowers and long beans but no berries. SAMUEL MILLER.

## FARMERS' GARDENS.

**EDITOR RURAL WORLD:** A good vegetable garden is conceded by most farmers to be both convenient and profitable, and yet comparatively few farmers have one. The reason usually given for the neglect is that they do not have time to attend to it. The truth in the case is that the garden requires a little care and demands thought, patience and system in order to secure success and profit. Unhappily these are just what most farmers dislike, preferring to tend the larger crops, where less thought and more muscular power are required. They would be glad of the rich products of the garden upon their table, and the health, pleasure and profit they would yield to the family, but the habit of neglect in this particular has become so deeply implanted that no common influence will break it up.

With the knowledge that half an acre, or even less, devoted to garden culture would naturally produce more profit than four or five times as much land in any of the other crops of the farm, thousands of our farmers still remain without a kitchen garden even that is worthy of the name. It would seem that pecuniary interests and a regard for the health and comfort of the family would overcome the dislike to cultivate a garden; but the aversion to systematic care overrides all these considerations, and the garden remains only in anticipation, or in some out of the way place, consisting of a few rows of potatoes, onions and beets, and a sage root or two, with a swamp of weeds, whose only redeeming feature is, at the end of the season, the presence of winter birds in search of a daily meal of seeds.

Without a garden the winter diet of the family must be mainly confined to bread, meat and potatoes. When warm weather returns, the system requires less stimulating food, and demands cooling and juicy vegetables, fresh from the soil; yet many farmers have no garden—not even an apology for one. Thousands of farmers' tables are rarely graced with the few rows of potatoes, onions and beets, and a sage root or two, with a swamp of weeds, whose only redeeming feature is, at the end of the season, the presence of winter birds in search of a daily meal of seeds.

Now part of the farm pays as well as the kitchen garden, if well taken care of. I do not mean by this that every farmer can make money by raising vegetables for market, because that is impracticable; but it is a self-evident fact that a farmer must procure the support of his family from his farm, and a well-conducted garden will conduce more towards this than any other part of the farm of five times the extent.

It is said by medical men that vegetables and fruits are conducive to health, and as most people, and especially children, are fond of garden fruits, it is policy for every farmer to provide a plentiful supply for home consumption. It would seem that people possessing all the conveniences that farmers have, as regards land and leisure to take care of a garden, would consume the largest amount of vegetable food, but the truth is, that more is used by the people in cities and villages than by the same number of land owners. Take a look among the farmers and it will be found that one-half of them have no gardens at all, or at most, little corner in a grain field, which is half overrun with weeds. Others have a place set apart for the purpose, but do not find time to do anything in it until all the spring farm work is done, thereby making it too late to secure any of the vegetables requiring early planting. This is a great loss when we take into consideration that such things are relished much more in the hot weather in June and July than later in the season. What is more aggravating than to know that one's neighbor has green peas, new potatoes, string beans and the like, and his own but just up, and all through his own neglect in not planting in season? And the farmers' wives and daughters also feel the effect of this neglect when, during the first two or three summer months, they have to rack their brains to think what to get for dinner; for when the men, weary with labor, come in from the fields their stomachs are apt to revolt against salt pork and old potatoes. But if there are early potatoes, peas, beans and other vegetables in the

garden, there is no trouble in getting up a dinner that the man can eat with a relish; and few things are more gratifying to the faithful housewife than to see her husband enjoy the food she has prepared for him. LEROY CARDNER, National Military Home, Kas.

## GROWING SWEET POTATOES.

**EDITOR RURAL WORLD:** Sweet potatoes are grown successfully in one-half the area of the United States. The crop produces from 300 to 300 bushels to the acre in the states south of Nebraska and New York, and fair yields are reported from Maine and the warm valleys of the irrigated west. The last official census gives the yield for the entire country at 44,000,000 bushels. Expert growers estimate the actual cost of production from 10 cents to 20 cents per bushel. As the market price ranges from 50 cents to \$1 per bushel, there is certainly good profit in growing the crop. I have sold good sweet potatoes at 10 cents per pound, but the general market price will not average more than one-third, or even as low as one-fourth that amount. Sometimes certain conditions cause very low prices, as in other farm products, but, as a general rule, the market remains very good.

The warm, sandy, well-drained soil is the ideal spot for sweet potatoes. The crop will not be satisfactory on heavy clay land or on old worn-out fields. New land is very good for the plant if it has not been heavily fertilized with barnyard manure. The potatoes will not grow to very great success in the shade, nor on a cold hillside.

The sweet potato is a heavy feeder and removes much plant food from the soil. According to reports of the U. S. Department of Agriculture, 185 bushels require 10 pounds phosphoric acid, 25 pounds nitrogen, and 50 pounds potash.

The potato thrives best on sandy soils, and these as a rule, contain the least plant food. An average application for sweet potatoes should be about 900 to 800 pounds per acre of a fertilizer running, six per cent phosphoric acid, 8 per cent potash and 4 per cent nitrogen, to be used before planting and well mixed with the soil.

Sweet potatoes are best grown from plants. These are started in hot bed or cold frame. My best plan for getting the plants is the cold frame. Dig the pit the size required, about two feet deep. Fill in six inches with coarse leaves or barnyard litter, to insure proper drainage. Then put about six to eight inches of horse stable manure, which must be well pressed down. On this put four inches of earth. Then lay the sweet potatoes as close together as possible without touching each other, and cover with fine sand or soil. Cover the bed with a cloth and on that place some boards or slabs to hold the cloth in place and protect against sudden freezes. Keep the bed well watered and the plants will be a success. The bed should be made about six weeks before the plants are wanted, which is usually about the first of May.

There are several good varieties, the Jersey or Nansen being best for early market, and the Yams best for late planting for the general market and stock feed. The potatoes will mature in from 60 to 90 days after planting. Plants should be set about 18 inches apart in furrows running north and south if possible, with plants on west side of furrow. The furrows may be three feet apart. Some plant thirty inches either way, requiring about 7,000 hills to the acre. Plants are usually set when six inches in height. Professor Galloway says in one of his earlier bulletins: "The disease first manifests itself in the form of small, more or less circular, brownish or blackish spots, which rapidly enlarge and run together, thus affecting the entire apple in a very short time. As the disease progresses the interior of the fruit becomes soft and brown and finally the whole shrivels and dries up. These effects are due to the development of the vegetative part of the fungus—the mycelium within the fruit." The spores or reproductive organs have been found during winter upon the surface of decayed apples. Whether these are the only means by which the fungus is perpetuated, or whether there are other germs that remain upon the tree; whether these retain their vitality until the apples are nearly full size and then, for the first time, germinate upon the skin, or whether there is a preliminary stage of growth upon some other part of the tree, or even upon some other plant, are among the facts that remain to be ascertained.

The rot spreads very rapidly from infected to sound fruit and great care should be taken not to store any apples that show the slightest trace of disease. The affected fruit that drops in summer should all be carefully gathered up and burned.

The potatoes may be plowed out after drying and marketed or put in the winter storage bins. They will keep if a uniform temperature of about 60 degrees is maintained. Some find the surplus potatoes left after the market prices drop, very valuable food for horses, cattle and hogs. Several canning factories are in operation putting the potatoes in three-pound cans and placing the product on the market with very satisfactory results. Some Southern housewives have found it very good and profitable to dry the potatoes in the sun, by slicing them into two pieces. The crop is one which every farmer should try, if he has the soil and the climate favorable. Seed potatoes may be obtained of seedsmen or the plants may be purchased at reasonable rates from those engaged in growing them in almost every state.

**JOEL SHOEMAKER,** Yakima Co., Wash.

## PAEONY.

**EDITOR RURAL WORLD:** In answer to a personal inquiry by an Illinois reader of the RURAL WORLD for more detailed instruction as to the cultivation and propagation of peonies, I would say the herbaceous species gives the best results on clay soil, sparsely mixed with gravel, sand and shale, with the soil rich with humus. The proper plant food ration for the peonies is nitrogen, four per cent; available phosphoric acid, eight per cent; potash, nine per cent. Give thorough cultivation, commencing as early as the soil will do to work, and continue up to the middle or last of August.

Propagation is done by seed selection. Select seed from the best developed seed-pods. After selecting the pods place them where they will thoroughly dry without molding. Prepare the ground and plant the seed from the first to the middle of May in open ground.

To perpetuate the varieties, there is no way other than dividing the hills. Roots two or more years old may be made to produce buds the second or third year after separating. In dividing hills there are more or less roots cut and broken off that are without buds, or are what is termed blind roots. These roots should be of good size, well matured. Smooth the broken top end with a sharp knife with one-third to one-half of a true mitre cut. These roots should be whole or in good length sections so as to have a good store of plant food in reserve. Place the roots in deep, rich soil, two inches under the level of the surface.

Plant any time after the plants are dormant in the fall. If planted as early as the first or middle of October, all the better. Then from time of planting up to freezing weather the surface should be kept fine and mellow with an iron rake. When there is danger of freezing weather setting in, then the surface should be covered eight to ten inches deep with manure fresh from the stable. As early

in the spring as the ground will do to work, the manure should be spread and forked into the ground. The roots may be kept in the cellar until spring, or the hills may be divided in the spring, if done as early as possible before the buds start. During the time that the roots are in the ground the surface wants a continuous stirring during the growing season to keep down weeds, conserve moisture and give warmth. These blind roots are nurseries and must be cared for as such, or failure will be the result.

In 1878 I took up a hill of Officialis Rubra peony that had been left standing for years, most of the time badly neglected. When I became owner of the place I took the entire hill and divided it into single roots, which I treated as above stated, and ninety per cent produced buds in due time. The twelfth year after, I sold the place and realized \$75 for the product of this one hill of peonies at wholesale. I speak of this to illustrate what may be done under proper conditions. In the 25 years of my experience with peonies I have grown about every known and named variety, and have experimented to make some profitable advancements. Last season we had several varieties that bloomed at the same season. At one time we had enough blooms to fill a wagon bed. We gave away to every one that asked for them. Thousands of the bloom remained and dried up on the stalks. Last fall I took up 35 hills of white peony plants and divided the clump and got 400 good plants, one and two buds to the plant, and 100 light plants with buds. The 35 hills were planted six years, one and two buds to each plant; besides I have quite a number of good roots without buds.

Linn Co., Mo. S. H. LINTON.

## BITTER ROT OF THE APPLE.

At the meeting of the State Horticultural Society in December, the apple growers reported heavy losses during the preceding summer from the above-named disease. From many of the largest commercial orchards in the southern part of the State no fruit whatever was packed or shipped, and to a greater or less extent the trouble prevailed throughout the State, says Mary E. Murtfeldt in the "Review."

The bitter rot, due to a fungus known as *gleosporium versicolor*, is not a new disease, but does not appear annually, and the causes of its occasional disastrous outbreaks have not yet been definitely ascertained.

The interest attaching to it and the apprehension among orchardists, lest it appear again during the coming season, suggested a personal appeal to Professor B. T. Galloway, Chief of the Division of Department of Agriculture, and our best authority on all diseases of plants of economic value, for some facts in regard to its nature and the prescription of a remedy. The reply was that owing to lack of funds the division had not been able to carry on the exhaustive experiments necessary to a thorough knowledge of the fungus, but that it was hoped that an appropriation would be secured shortly that would enable this matter to be taken up.

In the meantime, repeated experiments had proved that thorough spraying of the fruit, with the Bordeaux mixture (lime and blue-stone solution), if done upon the first appearance of the infection, will arrest the disease and save a large proportion of the crop. This species of apple rot may always be recognized by its intensely bitter flavor.

Professor Galloway says in one of his earlier bulletins: "The disease first manifests itself in the form of small, more or less circular, brownish or blackish spots, which rapidly enlarge and run together, thus affecting the entire apple in a very short time. As the disease progresses the interior of the fruit becomes soft and brown and finally the whole shrivels and dries up. These effects are due to the development of the vegetative part of the fungus—the mycelium within the fruit."

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## AN INSECTICIDE.

I make an insecticide that costs next to nothing; it is easy to prepare, pleasant to use, perfectly safe, and extremely effective, says Eben E. Rexford. It is simply good soap of household use, in the proportion of a quarter of a pound of it to ten or twelve quarts of water. Shave it up fine, cover with warm water, and set it on the stove to melt. When liquid, add it to the water, and then dip your plants in it. Leave them in it for half a minute, at least. I have never found anything among the expensive insecticides which was equal to this home-made one. Anyone can prove its efficiency with little trouble, and slight expense. Since I began to use it, I have found it an easy matter to keep the aphids where he belongs—and that is, away from my plants.

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Linn Co., Mo. S. H. LINTON.

**THE CROCHET MUSkmelon.**

**Editor RURAL WORLD:** Will you or some of the readers of your paper give me some information in regard to a muskmelon, which made its appearance in our home market about four or five years ago?

The melon is almost round, with no ribbing and resembles the Cosmopolitan and Cannon ball, but grows much larger, weighing from four to nine pounds; vines are very strong and thrifty. The rind is covered with a very heavy, coarse crochet netting. The melon is very firm and solid; flesh pale green with small seed cavity; flavor and quality good.

It is covered with the thickest and coarsest netting of any muskmelon I have ever grown, or even seen, and I have had some experience in this line, having grown melons for home use and market more than 25 years. In this locality it is called the Crochet Melon. The past two years I have written for and received a large number of seed catalogs, thinking I could find the information I wanted in some of them, but have failed to find it. I would be pleased to learn where it came from, who originated it, and when it was introduced.

C. T. STOOKEY.

St. Clair Co., Ill.

**GRAFTING.**—The best time for grafting fruit trees is in the spring, about the time the sap begins to move. This is earliest in the plum and cherry, and later in the apple and pear. The exact time, of course, varies a little with the climate and the seasons, but will usually be in March and April. A mild atmosphere and occasional showers are favorable to success. The scion should

## Live Stock.

March 18—B. O. Cowan, New Point, Mo. Shorthorn sale at Kansas City, Mo. March 27—Combination Galloway cattle. Chicago, Ill.

April 18—Boone Co. Shorthorn Breeders' Association, Columbia, Mo.

April 22, 23—N. H. Gentry & Son, Kansas City, Mo.

April 23 and 24—Two days combination sale; 100 high-class Shorthorns from herds of J. W. Kim, N. H. Gentry, Gentry Bros. and W. P. Harned.

SHORTHORNS.

March 24—W. B. Rigg, Mt. Sterling, Ill.

April 12—C. C. Bigler & Son, Hartwick, Iowa.

April 18—Boone Co. Shorthorn Breeders' Association, Columbia, Mo.

May 1—2—M. E. Jones & Co., S. E. Prather & Son, Springfield, Ill.

HEREFORDS.

May 21 and 22—C. A. Jamison, Peoria, Ill.; S. H. Godman, Wabash, Ind.; and others, at Chicago, Ill.

ABERDEEN ANGUS.

March 14—H. M. Gittings, Disco, Ill.

March 20—L. Gardner, Judy, Mattinson and Seelye, Kansas City, Mo.

April 29—Hall & Brown, Harris, Mo., and others, at Kansas City, Mo.

CATTLE PRODUCT DIMINISHING.

At a recent meeting of the American Cattle Growers' Association at Denver Mr. Vandorn, a large dealer in cattle products, made a statement before the body that shows a rapid diminution of beef animals in the last decade. In 1890 there were 559 head of cattle in this country for each 1,000 inhabitants, or more than one for every two persons. In 1899 there were only 275, or little over one for every three. This is a remarkable decline, showing a depreciation of nearly 40 per cent.

The main object of the convention at this session was to formulate an enactment to be adopted by Congress that will insure the honest execution of equitable laws that will protect the cattle grower in his work. Beef will soon become a luxury instead of, as at present, an accessible necessity.

If Mr. Vandorn is correct in his view of the situation, we trust the cattle men will see the impropriety of asking Congress to protect the cattle grower and in the same breath ask Congress to refrain from protecting the dairy men by withholding approval of the Granthill bill. As we have pointed out, the dairy farmers are the principal source of supply of feeders and are therefore the foundation of the cattle business. Cattle men will help themselves immeasurably by standing by the dairy men, and sustaining them in the fight against imitation butter.

PRODUCING MARKET TOPPERS.

Our Gentry county, Mo., correspondent, R. W. Mitchell, makes a point in his article on Selection of Bulls which cattle raisers and feeders can meditate over with advantage. The feeder he speaks of took pains to breed so that his calves were typical of the breed the blood of which predominated in his cows, and if he had a few cows of another breed these were taken away from home and bred to a bull of similar breeding. Uniformity is an essential in market topers and this cannot be had from promiscuous, haphazard breeding even with pure breeds.

As we stated in a former issue, it takes more than skilful feeding to produce the best results on the block; the task begins generations back from the animal that is to furnish the steaks and the roasts. Of course the raiser of feeders cannot ordinarily go back farther than to the sire and dam of the animals that are to go to the consumers, but he should make the best possible use of the skill of the breeder of pure bred stock and exercise carefully the right to select sire and dam.

As we have said, the prices that cattle bring at the slaughtering market depend largely on the men who raise the feeders, and if the majority of those who are raising feeders could be induced to follow the methods given by Mr. Mitchell it would do more to enhance the price of beef to the producers than anything else.

That the methods are good is proven by the record made in the case cited. When the cattle raised by one man tops the Chicago market five years out of 15 it is evident that the system followed in producing those cattle has merit.

We will be glad to hear from others on this important matter of producing market topers.

WHICH SHALL IT BE?

When farmers contemplate purchasing a pure bred bull or a trio—two cows and bull—or some one of the established breeds of beef cattle, they will ask for advice, as to which is the best for them to purchase. Which is the most profitable?

is a query that is oft put to stockmen, to editors or those who are supposed to be familiar with the characteristics of the several breeds. The more a stockman knows of any or all the pure breeds, the more a puzzle does he regard such an interrogation; because his wide knowledge of not only the breed he is interested in and its special history, but as well his knowledge of the herds of other breeds assures him that success may be attained with any of the breeds—providing, "Ay, there's the rub"—an intelligent study is made of the one selected and that the man starting to breed pure bred stock will absolutely pin his faith to the breed selected, whether it be Shorthorn, Hereford, Angus or whatever it may be. The problem resolves itself back to the man, rather than the breed.

A study of the herds of some breed will be most profitable to a young farmer contemplating embarking in pure bred stock. In the majority of cases it would be wise to confine the study to that breed that is most general in one's section. In this study care should be taken to note well the beginnings of these herds rather than as now found. Present flourishing conditions may discourage, as the fine herd which is so valuable seems impossible, when even the means to purchase a pure bred sire is difficult to provide.

If a farmer has made a success of any one of the pure breeds in your neighbor-

hood, why shouldn't you? The natural advantages of a farm on which is being kept a herd of pure bred stock and the measure to which this herdsman is making use of them, will be a guide as to whether the farm you own would warrant your establishing a herd of similar breeding. Note the care given the herd. Unless a man is conscious that he himself has developed traits that will see that pure bred stock will get painstaking care, the scrub will pay him best, because it doesn't require so much money to purchase this "old Brindle" and she is tougher. Circumstances, environments, opportunity have oft been the reasons that have controlled the establishment of herds of the several breeds, and the men having by such order had the herds, have faithfully studied the strong points of the herds and have bent all intelligence and energy to make their special herds representative ones. The "which shall it be?" was a later issue. The owners of the herds made them what they are. There are similar chances for young breeders, when the same untiring intelligence, care and work are expended on a herd. Count the farms in your township that have on them pure bred cattle. Which abound, scrubs or pure breeds? On your farm from this time, as fast as circumstances permit, which shall it be?

This query when aimed at scrubs and pure breeds is more vital than when pointed at the various breeds or pure bred cattle.

### SELECTION OF BULLS TO PRODUCE GOOD FEEDERS.

Editor RURAL WORLD: My vocabulary is limited when it comes to word painting and using unique embellishments to dress, ornament and emboss practical ideas, hence I will desist—even in attempt—and proceed with the topic.

Personal experience and association with a gentleman who has successfully reared feeders, to put on the market or in the feed lot, have shown the following method to be successful: The breeding cows possessed not less than 50 per cent of beef-bred blood, and a pure bred bull of the blood carried by a majority of the cows, whether Shorthorn, Herefords or Polled-Angus, was kept. Thus the offspring would be three-fourth bloods or better. If some of the cows or heifers were of different blood these would be taken to bulls of their breed.

This man has topped the Chicago market twice in 15 years, when he finished the cattle, and he has sold feeders that others have finished and topped the same market with three times during the same period. So 33 1/3 per cent of the feeders reared by him in 15 years were market topers.

Now as to the selection of the bull. Price cuts no figure, if the animal possesses quality, conformation and beef breeding characteristics. When an animal was needed breeders of reputation, like those who advertise in the RURAL WORLD, were visited. An animal was brought out and carefully inspected along these lines: Position on feet and head on neck were noted to get the carriage of the animal. Head must have broad forehead; eye parallel with base of horn; clean-cut nose; wide muzzle and short, quick maxillary. Back, straight and broad, ribs well sprung, but not so much as to make a round body—this must be avoided. Hips parallel with pelvis. Flank and heart girth as near the same in measurement as possible. Beefy to knee and hoof.

During the inspection the hand is kept on the animal, so as to note carefully the condition of the hide; if mellow the circulation is good, but if harsh and dry, circulation is slow and sluggish and the digestive organs do not perform their proper functions.

The calves from such a bull are worth \$2 per head more than those from an animal though he be a pure bred, that is lacking in these qualities, because an individual with these characteristics will impart them to his offspring. With 50 per cent of beef to the producers than anything else. That the methods are good is proven by the record made in the case cited. When the cattle raised by one man tops the Chicago market five years out of 15 it is evident that the system followed in producing those cattle has merit.

We will be glad to hear from others on this important matter of producing market topers.

STOCK NOTES.

J. T. STEWART, Columbia, Mo., is advertising his Hereford cattle in another column. He is offering a good lot of well bred bulls and heifers, and at live and let live prices. He can either sell you a single animal or a car load. Look up his advertisement and if possible go and see the cattle. You will be pleased with them.

LOVING SAILS FOR LONDON.—Fort Worth, Tex., March 13.—George B. Lovingsome who some time ago attempted to float a \$50,000 cattle enterprise, sailed from New York Saturday for London. He goes on another cattle deal and will be absent one month. An effort is being made to dispose of the Capitol syndicate company property in the Texas Panhandle, the largest cattle company in the world. It is understood the deal will involve several million dollars.

R. W. MITCHELL, Gentryville, Mo.

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B. O. COWAN, New Point, Mo., and others will sell 60 head of Shorthorns at Kansas City on Friday, March 23. Ten head are Scotch, many Scotch tops on excellent families. Mr. Cowan will sell 44 head. T. B. Rankin, Tarkio, Mo., will sell 13 head and C. H. G. Haggard, Western, Neb., three head, including his fine herd bull. Parties desiring some well bred, good individuals, should send for catalog at once to B. O. Cowan, New Point, Mo.

AUDRAIN CO., MO., NOTES.—The Shorthorn interests in Audrain County are in a most prosperous condition.

At the Shorthorn cattle sale at Kansas City Tuesday M. B. Guthrie of this city paid \$25 for Violet IV and bull calf, dam 3 years old. The cow and calf came from the herd of T. J. Wormald of Liberty, Mo., and are fine ones.

S. P. Emmons sold some Shorthorn heifers in Kansas City that averaged \$75. It pays to grow the best. The Shorthorns of Mr. Emmons are evidently among the best—Texas Ledger.

MESSRS. J. H. FULKERSON & SONS, Jerseyville, Ill., have an advertisement of Shorthorn bulls in this issue to which we ask the attention of our readers. These bulls are of the best Bates breeding and are excellent in quality and will be sold at reasonable prices. They are of the Barrington, Illustrous, London Duchesse, Rosemary and Western Lady families. Excepting three, they were sired by 4th Duke of French Creek 127946, 2d Duke of Forrest Grove 97335, and out of Duchs of French Creek by 12th Duke of Hill 121066. The three exceptions are by a good Scotch bull.

The Messrs. Fulkerson need no introduction to our old-time readers, and to

the new ones we only need to say that they are among the oldest breeders in Illinois and that they have a national reputation as breeders of good cattle. They are honorable and fair in all their dealings. Col. Fulkerson, the head of the firm, is one of the most influential men in agricultural matters in his state, having long been identified with the Illinois Board of Agriculture, the Illinois State Fair and other enterprises for the advancement of agriculture. Send for a catalog and arrange to visit the herd.

### RANGE BREED BREEDING CATTLE.

The San Rafael Hereford cattle sale at Kansas City, April 2 and 3, is advertised in this issue. These Herefords are bred on the range in Arizona by the San Rafael Hereford Cattle Co., under the management of Mr. Colin Cameron, Lochiel, Ariz. The sale is conducted by Mr. T. F. B. Sotham, Chillicothe, Mo., to whom all inquiries for catalogs should be directed. Col. Woods, Edmondson and Sparks are the auctioneers. Two hundred head and have bent all intelligence and energy to make their special herds representative ones. The "which shall it be?" was a later issue. The owners of the herds made them what they are. There are similar chances for young breeders, when the same untiring intelligence, care and work are expended on a herd. Count the farms in your township that have on them pure bred cattle. Which abound, scrubs or pure breeds? On your farm from this time, as fast as circumstances permit, which shall it be?

SCOTT & MARCH, Breeders of Registered Herefords.

Young Stock for sale.

Shorthorn Cattle—Scotch, Scotch Topped Bates and Bates Topped.

As good blood as the breed contains. Imp. Nonpareil Victor 123273, Imp. Blackwater 125524, Grand Vie 127028 and Windsor Duke 11th, 13th in service.

Young stock for sale. Come and see or address GEO. BOOTHWELL, Nettington, Mo.

IDELEWILD SHORTHORNS!

Special offering, 20 yearling bulls, 20 yearling heifers. Largest herd in the State and no par-

ents. No. 1000 Bull. Price \$250.00 with buyer's choice top.

When you buy a carriage, buggy or harness, choose from the biggest stock and fullest assortment, and get the best value for your money. Order direct from the factory insure satisfaction—your money back if you're not satisfied. Get in touch with us and learn how cheaply you can buy.

THE COLUMBUS CARRIAGE AND HARNESS CO., Box 772, Columbus, O. Buses, Harnesses, Wagons, etc.

No. 1000 Horse.

When you buy a carriage, buggy or harness, choose from the biggest stock and fullest assortment, and get the best value for your money. Order direct from the factory insure satisfaction—your money back if you're not satisfied. Get in touch with us and learn how cheaply you can buy.

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THE COLUMBUS CARRIAGE AND HARNESS CO., Box 772, Columbus, O. Buses, Harnesses, Wagons, etc.

No. 1000 Horse.

## Horseman.



SOUTHWEST MISSOURI CIRCUIT.

Eight Continuous Weeks.

Quincy, Ill.	July 22-26
Columbia	July 26th-Aug. 2
Holden	Aug. 6-9
Harrisonville	Aug. 13-16
Rich Hill	Aug. 20-23
Nevada	Aug. 27-30
Higginsville	Sept. 3-6
Sedalia, State Fair	Sept. 9-14

The Holden, Harrisonville, Rich Hill, Nevada and Higginsville Associations have adopted the following classes and stakes, viz:

TROTTERS—2:45 class, \$400; 2:30 class, \$500; 2:23 class, \$1,000; 2:18 class, \$500; two-year-olds, \$200. PACERS—2:35 class, \$400; 2:25 class, \$500; 2:21 class, \$1,000; three years and under, \$300; two years, \$200. All stakes to close June 15th. Write to Col. John D. Moore, Secretary, Rich Hill, Mo., for programme giving rules governing entries and full information governing the stakes for the above five meetings. Programmes for Quincy, Ill., Columbia, Mo., and State Fair at Sedalia not yet issued.

Col. T. S. Baldwin of Baldwin Park, Quincy, Ill., sends the RURAL WORLD a program of its classes and purse for its meeting July 22-26. We give the following features: For trotters, 2:40 class, 2:25 class, 2:17 class, \$500; free-for-all class; For pacers, 2:40, 2:17, free for all, 2:24 classes. The purses for all classes, both pacers and trotters, are \$300 each. Any further information can be gained by writing Col. T. S. Baldwin, Quincy, Ill.

Col. John D. Moore of Rich Hill, Mo., Circuit Secretary of Southwest Missouri Circuit, in a letter to the RURAL WORLD, says: I have 12 teams and 15 men at work on our track here, regrading and reselling it. I am determined to put it in condition to be the fastest and best half mile track in the state, and as the other members of our circuit have advised me that they were going to improve their tracks, I have decided to keep pace with them and to improve our track materially, and to have a better track, if possible, than any other member of the circuit. Our track was a little cuppy last year, but with fresh soil and proper working we can overcome that. Prospective for fine meetings throughout our circuit are very flattering.

W. F. Schade, of Pocahontas, Mo., has secured from the Colman Stock Farm for the season of 1901 the stallion Wilkesy 3333, by Red Wilkes, the sire of over 145 performers in 2:30 or better, among them Ralph Wilkes, 2:06%; and others nearly as fast. The dam of Wilkesy was Balloon, by Belmont, son of Abdallah 15, and her dam Augusta, was by Caliban, sire of C. F. Clay, 2:18; Cyclone, 2:23. Caliban was by Mambrino Pilot, 2:27, to saddle, and he by Mambrino Chief, out of Juliet, by Pilot, Jr. Caliban's dam, Molly Shawan, was by Abdallah 15, thus getting two lines to that sire. Mambrino Pilot's dam was Cassia, by C. M. Clay, Jr., 22, a great sire. Here is one of the strongest pedigrees in the books. As a weanling Mr. C. B. Parsons, of Riverside, paid W. C. France & Son, three thousand dollars for this colt. He is 16 hands and one inch high, solid bay, heavy bone, body and muscle, with the finest trotting action, and in any community and for any purpose would fill the eye of a horseman. Mr. Schade is the owner of Polndexter Squirrel 333, S. H. R., a very fine saddle stallion, and with these two stallions expects to do a large business.

## VISIT TO SELMA.

(Concluded.)

But few trainers anywhere can show a stable of better bred or more promising horses than Sam R. Gilbert has at the Selma track. A mere list of them is about all our space will allow us to give. Among the stallions are Beaumont Wilkes, 2:29%; by Wilkes Boy, dam Jennie Beaumont, 2:26%; Temple West, by Temple Bar out of the dam of Allie Wilkes, 2:15%; Allie Vincent, by St. Vincent, out of dam of St. Edwards, 2:19%. Among the mares we noticed Annie Bostic, by Wilkes Boy, dam out of the dam of Grattan, 2:12. She is full sister to Grattan. See Bird, 4 years, by L. H., by Cambidile, dam by McCurdy's Ham; Sue W., 4 years, by Re-Election, dam by Wedgewood; gray filly, 2 years, by Re-Election, dam by McCurdy's Ham; Ella May, by McEwen, dam by Dorsey's Goldust; Black horse, 4 years, by Muscovite, dam by Onward; The Baron, by Baron Wilkes, dam Ethel, by Strathmore, dam of Bumps, 2:08%; Edw. G., 2:12%; Bessie R., by Artillery, dam by Hull; Anna R., by Shadeland Onward, dam by Nutwood; Superba, 2:30%; Lebida, by Oratorio, 2:18; Little Bess, by Dividend; Jerry Jones, by Esculus; Levi, by Bill Oates; Selma, by Nettie Keenan, Jr.; Larvin, by Allie Vincent, dam by Elgin Boy; Joe Harrison, b. c., by Rex Americus, dam by Wedgewood. When it is known that Sam Gilbert is one of the best trainers and drivers in the country, horsemen when they come to meet him in the races with the pick of this stable would seem as if they might have some good ones sometimes.

At the McCann farm Mr. Headley and his brother-in-law, new members of the RURAL WORLD family, have Olive Red Boyd by Red Boyd, son of Dominion by Red Wilkes, and two of her colts by Gilbird's Sprague and her yearling filly by Douglas T., sire of Alvin R., 2:14%, and Jack L., 2:25, and the mare is bred back.

They also have a yearling Douglas T. filly out of Gertrude by Trumpeter 2:29%; Gertrude, 2:35, by Pocahontas Boy, 2d dam Bridget by Blue Bull 70. These mares and foals were all bred by G. W. McCann and were purchased with the farm, as also the herd of Jerseys with 12 cows now in milk and a market at hand for more butter than they can make. Few farms are better arranged for breeding any kind of live stock. I noticed at the place a nice flock of Barred Plymouth Rock chickens and a flock of Pekin ducks. It is quite plain the readers of the RURAL WORLD will know more of this farm, as they learn more of the RURAL WORLD and its mission.

Harry T. Nethaway has a stable full of diamonds of the first water. His string of horses is owned by W. F. Edmunds of New York and is receiving best care and attention. Among them are Aftermath,

Horse Owners! Use GOMBAUL'S Caustic Balsam

A safe, Read BLISTER ever used. Takes off all blisters, scabs, crusts, etc.

Removes Bunches of Blistered Areas, etc.

REMOVES SPURRERIES ALL CAUTERY

ON FINS, ETC. ETC. ETC.

Every bottle sold is warranted to give satisfaction. Price \$1.00 per bottle. Sold by druggists, or by mail. Send for descriptive circular.

THE LAWRENCE-WILLIAMS CO., Cleveland, O.

## OZARK HEARD FROM AGAIN.

Editor RURAL WORLD: I got tired casting pearls before swine and last summer sent a car load of horses, brood mares and young things back to North Iowa. I kept the stallion, two mares, three fillies and a colt. I broke the colt and Florine's filly to halter by putting halters on them in their box stalls and letting the tie strap drag on the floor. After a few days they would lead and stand quiet tield. I have always found that the best method.

Mr. Ben Renich has some first-class horses in training, among them Midway 2:12%; a 3-year-old, with a record of 2:29% by Re-Election; a gelding by McEwen, with a record of 2:25; a 2-year-old, by Rex Americus; a 3-year-old, by the Prince of India; a 3-year-old, by Arion, 2:07%; a green pacer, by Muscovite, etc. Many of these have shown miles in 2:15. Mr. Renich will have them in first-class condition for racing when they start north.

If the horses now at Selma are not affected by the change of climate when they go north they will have decided advantages over northern horses, as they will be better conditioned for races. They should not start north until about the middle of May, when all danger of cold weather will be over, and they will then go into an atmosphere similar to the one in which they have passed the winter. Selma is undoubtedly a first-class place for the development of speed and condition in winter. We know of no place where better conditions for these purposes prevail. Our visit was a pleasant and instructive one.

## L. E. CLEMENT'S HORSE GOSSIP.

Editor RURAL WORLD: Last week I dropped in on Springfield. My first visit was to Truxall, the Boonville street feed man. I asked him how Prodigal Jim was doing and what was new. The question in answer was, Have you seen Dunn? I told him no and he said, he is at the show grounds, where they are going to put in a track for matinee races. One block back and I found J. W. Dunn, late of Windsor, Mo. He said: "This is one of the most awful mess you ever read. He does not put the Morgan horse in the class with trotters, but specially denounces the great American trotter and goes on with a fictitious standard that would kill a swine stuffing a greenle. It is poisoned with the usual coach horse lies and a few extra added from the draft bull collection. Any one competent to teach horse, even in a country lively stable, knows that the greatest coach horses on earth are American trotters. That the only perfect carriage horse is the great American trotter. That the horse nearest the all-around all-purpose horse is the great American trotter. With my two trotting mares, Florine, 2:30, trial 2:10, furlong 14%, and Roberta MacMichael, trial of three years in a race with six weeks' preparation and heavy with foal, 2:29%. I haul wood for two fireplaces and two stoves, haul manure, plow, drag, haul feed, etc., and go the road a 3:00 gait, outlook all the teams in this county, and Roberta (Bertie for short) can out-augment any coach horse that ever trod the earth that is not a trotter bred, is 16 hands high, topy and game to the core, and quiet to drive. Florine is long low gaited to coach honors and too highstrung to take it easy on the road, but her daughter by my 1,350 pound standard stallion is as coachy as her sire and speedy as her dam. Is there no way to protect the public from those so-called professors whose ignoramance is as dense as their influence is detrimental?"

One standard mare, beside my own, was sent to the embrace of the only standard stallion in Pulaski county. It and another of Frank's are the only ones besides mine that I know of in the country. The dung hill with a Jimmy made pedigree is the prevalent curse in this country. One rascal at this place with a liver regulating studhorse printed a yellow pedigree last year in which he forced Lexington to sire Boston. Another in the south part of the county took a double column page length in a country paper to print a pedigree that no description can give. You should see it. It would make an Indian laugh. And such horses at \$4 to \$6 fees for "standing colt" catch the breeders and the top price for the progeny at maturity is \$35 to \$60. The same mares bred to a big, good standard stallion would throw foals that at 5 years would fetch from \$100 to \$600. The good old foundation blood is not quite all bred out of the mares yet.

OZARK.

SWOLLEN NECK.—I have a cow that has been ailing for about two months.

I took a look at her udder, about the size of a small ball or yellow grape, on an upper, about the size of a small pea. What is the trouble and what is the remedy?

E. S. NICHOLSON.

It is only an incident.

It is only an incident

## Home Circle.

### WORDS.

Words are great forces in the realm of life; Be careful of their use who talks of hate. Of poverty, of sickness, but sets rife Those very elements to mar his fate. When love, health, happiness and plenty hear. Their names repeated over day by day, They wing their way like answering fairies near. Then nestle down within our homes to stay. Who talks of evil conjures into shape That formless thing, and gives it life and scope. This is the law; then let no word escape That does not breathe of everlasting hope. —Ella Wheeler Wilcox.

Written for the RURAL WORLD:  
YARD DECORATIONS.

This problem confronts the farm home each spring. We often have vivid recollections of the failures of previous years, of the daily, year, hourly battles we had with Biddy and her brood that thought the mellow flower bed the ideal spot for a dust bath, and the tender buds of potted plants tidbits for baby chicks. Even more aggravating was the proposition to tie the calf in the front yard where the grass was tender and juicy and bosome could be in the shade. If these conditions were overcome, drought in midsummer would give us parched plants instead of fresh, fragrant blooms; so we conclude, no flowers in mine. We have had the experiences and know how discouraging and disappointing such conditions may be, yet our yards are the playgrounds by which many read our success or failures in life. You know all the success of life is not shown in a bank account; much the greater proportion will be chronicled in the record of the power we have exerted in making life for others brighter, and this flowers rarely fail to do.

Each farm home must arrange the floral decorations so that they will give pleasure without adding great burden to the already too busy household. Study the varieties that will give brightness and fragrance and will stand some neglect. Don't think because a neighbor who has a small family and has excellent health and in consequence can have many beds of many varieties of flowers, that you must have them, too, even if the moments that should be given to rest must be spent in their cultivation. A sensible mother with several young children looked with envy on her neighbor on an adjoining farm as she moved about planning and arranging her flowers one spring. She sighed, and said: "I can't care for the children and the flowers, too." Her home was on the prairie, and her yard was flowerless and treeless. She had been reared in an Eastern state, and yard decorations had been a marked feature of her girlhood home. Anyone who has come from such a home to a prairie home can understand how this mother felt. But she was wise and brave. Her husband sympathized, and flowers were, for the time, gathered from the fields instead of from her yard; but young forest trees were planted and the yard seeded to grass. This was kept in good condition and ash heaps, wood piles and all things unsightly were relegated to the rear of the home. The trees were planted so that their shade would in time be enjoyed and the view from the house not be obstructed. Much intelligent thought was given to their location, most of them being planted to the sides and rear, with one or two groups of trees planted well down from the house and not immediately in front.

This was kept well 23 years ago. The boys to-day are young men, and this yard now is the ideal place in the community for its social gatherings. This home, too, is five miles from any railroad, yet the young people from the surrounding farm homes who assemble under those trees give evidence of large culture, the larger proportion having been given opportunity of higher education. If flowers can't be cared for plant trees and interest father and the boys.

Last summer, when all nature seemed thirsty, brown and sere, a community was visited where in a yard were seen groups of castor beans, around which were grown petunias. The effect was charming. The only care given them was an abundance of water. The ones planted at the north side of a house made tropical growth.

All can have some gratifying success with flowers, vines or plants if environment is studied.

MRS. MARY ANDERSON.

Caldwell Co., Mo.

Written for the RURAL WORLD:  
TREASURE THE KEEPSAKES.

In looking through our RURAL WORLD we were particularly impressed with C. D. Lyon's ideas of what the farm home and farm life should be. His comments will apply to, not only farm homes, but city homes as well. As a nation, we have very little individuality, as regards our homes and surroundings. Millionaires imitate the English in building their homes and ornamenting their grounds; the rich copy, or try to, the homes of millionaires; the laboring classes ape the rich, and so on down the scale. We are a race of imitators. Everything too, must be "up to date." The dear, old, comfortable, split-bottom armchair, grandfather's favorite resting place by the fireside; the time-worn writing desk that grandmother prized, because it was once a treasured belonging of her mother; the old silver candle sticks that were the delight of our colored mammy. Aunt Phoebe, have all been relegated to the attic, because "not up to date." But "Madam Grundy" has of late been especially kind for once—all the old heirlooms and antiquated articles of household use and ornamentation are being brought forth from the rust and dust. We place them around as near as possible in their old familiar corners, holding sweet communion with the absent ones all the while.

The left arm of this old chair has a depression on the inside near the back. It is the right arm that has been re-covered with leatherette. It softens the child, allays all pain; eases wind colic, SYRUP, and is the best remedy for diarrhea. Sold in jars, 1 lb. with spoon. Price 25¢. Send for "Mrs. W. G. GROVE'S" signature is on each box. MRS. J. M. MACKINTOSH.

caused by grandfather hanging his "every day cane" of cherry with crooked handle over the arm, when he sat down. His "Sunday cane" was of ebony, with golden knob, all chased and carved, and with his monogram on the end. We raise the lid of the desk; right here in this compartment is where grandmother kept her important letters, and here is where she left what she treasured above all else, the genealogical history of her family. Ah! how she tried to impress upon us grand-daughters the importance and value of a family tree. What was it to us? It was no honor, we were sure to be descendants of an English King. So the papers are gone, with the bundles of letters tied so neatly and so treasury by her. Why is it that the younger generation is so heedless, taking no care of documents that would give worlds to own when growing aged themselves? We turn from the desk, taking the candlesticks in our hand and place them on the shelf on each side of the clock, and that calls to mind grandfather's old clock. We remember his winding the clock every night, then turning to grandmother and saying: "Peggy, it's bed time;" when the younger members of the family would scamper off to bed. O, dear! O, dear! This is such a beautiful world if we could only keep our loved ones with us; all the dreadful storms, earthquakes, drouths and other evils of our world are as nothing compared with losing dear ones in death; and we should treasure their keepsakes, for there is sure to come time when we will prize them above all price. Bottineau Co., N. D. "NANCY."

Written for the RURAL WORLD:  
A NEW HOME.

We've taken peaceful possession of a home recently, so you see I'm home at last, and must tell you so, for it is the one object I've longed for ever since I started out for myself—a homeless girl school teacher.

Ten years ago I married a farmer without a home also; but we thought with our united efforts we would soon have a home. We went to the Chickasaw Nation, I. T., and rented land.

We did well and could have procured a home ere this, but my husband was a favorite with a man he did business with for eight years, who gave him money-making advantages which were, he thought, quite a consideration, and which induced him to remain a renter longer than he would otherwise have done.

On a rented place one is aware one cannot build a permanent home, for even an Indian could not give a home if he desired to, because he could not give a lawful title to it. The Indians' country is in an unsettled condition, and it may be eight or nine years more before their land affairs are such as to permit them to make a lawful deed to anyone. When the proper time comes, we believe good homes can be got for reasonable sums.

While renting we took a just pride in keeping up the place where we lived. We took a great delight in our immediate surroundings, as well as in good clean crops. My yard was a mass of flowers in their season. I had also vine-covered arbors or porches. The thought would often arise in mind, I can not arrange the thin and somewhat amusing arguments of Mr. Kinder in behalf of mon-

grels? Our Standard should give weight for Leghorns as well as other fowls, yet over large birds of any breed are not such hustlers as the medium or smaller-sized birds; and those that are ready to hatch for a living are the profitable ones. Let us have size along with our markings, but never give up the right markings in plumage or otherwise for half pound of a pound of extra meat.

MRS. BELLE BALDWIN.

Shelby Co., Mo.

Editor RURAL WORLD:

EXPECTATION.

"With what a heavy and retarding weight Does expectation load the wings of time."

Surely no words in our language can better express the cares of human life than do those of the above lines. Whatever our surroundings may do, whatever the scenes that encompass us, the weight of expectation loads the mind with the fear that the desired aim or pleasure may not be realized. The air castles, built for betterment, may be demolished by the rugged changes of time, the bright anticipations of enjoyment of some object or possession to be attained may be shattered by disappointment. At the great curtain of time slowly unrolls, gradually revealing the mysteries beyond, the reality may form a picture far different from that portrayed by the expectation. And as the years roll on from youth to age the varied changes that strew the pathway may destroy the actuality of the dream of expectation only to awaken new expectations for the days and years to come. Thus life drifts away and the end comes, leaving a record of existence to the very reverse of what would have been had the substance of expectation materialized.

DYKE. The Cliff, Ill.

Written for the RURAL WORLD:  
OUR MINISTER.

Is it not a little strange that some persons can see so much more loveliness in things and people than others do? I sometimes think it is because there is so much more of the beautiful in their own hearts, and that it is the reflection of this they behold with the mind's eye. Just such a personage you will find in P. J. Rinehart, our young minister. He sees only the beautiful. If he were to visit you, and your yard were full of weeds, and there was one rose bush full of roses in it, he would never see the weeds, but would walk straight to the rose bush and stand there entranced by its loveliness, oblivious to all else. He would not realize that there was a weed in the yard. To this young minister things look more beautiful than they would to one less cultured and refined, for he is a man not only capable of seeing the beautiful in everything, but he wants others to see it. I think this is the secret of his seeing so much to admire in my home.

Mr. Rinehart is a young minister, and we all love very much. He has ability that will enable him to be recognized as a divine of power and influence. He has spent much time in our home, where his presence comes sunshine. He inspires one with a resolve to be better. He is one that sees loveliness in all of God's works. He is a man of fine presence and always manifests the spirit of the Christian gentleman, who lives to do good.

ROSA AUTUMN.

Rosedale Farm, Ill.

Written for the RURAL WORLD:  
WE NEED SUNSHINE.

G. of Pettis Co., Mo. asks: "How long could we live without sunshine?" Not long, as I can testify. I moved into my present house about a month ago. It had not a single window. It seemed as if I were in a dungeon. I was not long getting some windows. Sunshine is health to the physical man, as much as spiritual sunshine is to the soul. Without the sunshine of God's love this world would be a dreary place.

For myself, all I wish in this life is the privilege of rearing my six children to be useful men and women. The youngest has never seen his father's face, will never hear his voice, or never feel a father's love.

MRS. M. E. WARREN.

Cherokee N., Ind. Ter.

Turnips are improved by adding one or two tablespoonsfuls of sugar when cooking.

Water for laying dust is more effective if salt is added.

Do not pat or smooth down mashed potatoes, as it makes them heavy.

Min. ginger-cookies with cold coffee instead of water; it will improve them.

Savory your cold tea for the vinegar barrel. It sour easily and gives color and flavor.

Cherokee N., Ind. Ter.

Too much salt prevents bread rising.

To whip sweet cream successfully it should have stood at least twelve hours.

To have baked apples good and tender, put them into boiling hot water a few minutes before baking.

Always rub all fruits well with flour before adding to the cake; this prevents their settling to the bottom.

WHITE ROCKS exclusively: eggs, \$1.00 per dozen. ROBERT H. HUME, Florissant, Mo.

Silver-Laced Wyandottes.

A few more old cockerels for sale at \$1.00 per each. EGGS—\$2.00 per dozen fr. m. yards headed by 1st, 2nd, and 3rd premium cockerels at Mo. State Show and in regular shows. S. C. COODING, Sedalia, Mo.

TO CURE A COLD IN ONE DAY.

Take LAXATONIC HOME QUININE, 100 grains, 100 gr. sugar, 100 gr. honey, 100 gr. cornstarch. It sooths the child, softens the gums, allays all pain; cures wind colic, SYRUP, and is the best remedy for diarrhea.

Sold in jars, 1 lb. with spoon. Price 25¢. Send for "Mrs. W. G. GROVE'S" signature is on each box. MRS. J. M. MACKINTOSH.

SOMEHOW OR OTHER.  
The good wife bustled about the house, Her face still bright with a pleasant smile,  
As broken snatches of happy song,  
Strengthened her heart and hand the while.

The good man sat in the chimney nook, His little clay pipe within his lips, And all he'd made and all he'd lost Ready and clear on his finger tip.

"Good wife, I've just been thinking a bit; Nothing has done very well this year; Money is bound to be hard to get, Everything's bound to be very dear; How the cattle are going to be fed, How we're to keep the boys at school, Is kind of a debit and credit sum, I can't make balance by any rule."

She turned her round from the baking bread, And she faced him with a cheerful laugh;

"Why, husband, dear, anyone would think That the good, rich wheat was only chaff."

And what if the wheat was only chaff, As long as we both are well and strong?

I'm not a woman to worry a bit—  
Somehow or other we get along.

"Into some lives rain must fall; Over all lands the storm must beat;

But when the rain and storm are o'er, The after sunshine is twice as sweet.

Through every strait we have found a road,

In every grief we've found a song,

We've had to bear and had to wait—  
But somehow or other we get along.

"For thirty years we have loved each other.

Stood by each other whatever befell;

Six boys have called us father and mother.

And all of them living and doing well.

We owe no man a penny, my dear,

We're both of us loving, well and strong;

Good wife, I wish you would smoke again,

And think how well we've got along."

H. E. GEER, Farmington, Mo.

Editor RURAL WORLD:

A NEW HOME.

We've taken peaceful possession of a home recently, so you see I'm home at last, and must tell you so, for it is the one object I've longed for ever since I started out for myself—a homeless girl school teacher.

We did well and could have procured a home ere this, but my husband was a favorite with a man he did business with for eight years, who gave him money-making advantages which were, he thought, quite a consideration, and which induced him to remain a renter longer than he would otherwise have done.

He killed his pipe with a pleasant laugh.

He kissed his wife with a tender kiss;

He said, "I'll do as you tell me, love;

I'll just count up on the other side."

She left him then with his better thought,

And lifted her work with a low, sweet song.

A song that followed me many a year;

"Somehow or other we get along."

—Selected.

Written for the RURAL WORLD:  
EXPECTATION.

"With what a heavy and retarding weight Does expectation load the wings of time."

S. C. LEIGH, Sedalia, Mo.

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**TRY  
Allen's Lung Balsam**

**FOR  
THAT  
COUGH**

You will be pleased with the results. It contains no opium in any form, and as an expectorant it has no equal.

Mother's will find it a pleasant and safe remedy to give their children for whooping cough and croup. At druggists, 50c, 75c and \$1.00 a bottle.

**6 ARMS** of plumb ains timber and casab. Cheapest, strongest, most desirable; 4,000 of them in 45 strength. Tested for 18 years. Book for stamp.

**SHAWNEE BROTHERS**, Beloit, Wisconsin, O.



**Dana's White Ear Labels**

supplied with any name or address with consecutive numbers. I supply forty recording associations and thousands of practical farmers, breeders and others.

G. H. DANA TO Main St., West Lebanon, N. H.

**Chicago Sheep Shearing Machine**

1905 Model Stewart's Pat.

**Price \$55**

Guaranteed to shear any kind of wool that grows, all growths from fine to solid metal and hard-coated.

**BOOK ON SHEARING** just published. Fully illustrated, with valuable hints for fast and easy shearing by the machine. Price, \$1.00. Send 50c postage, plus 10c for shipping. Address, G. H. DANA, Chicago Flexible Shaft Co., 158-160 Huron Street, Chicago, Ill.

**BERRY'S IMPROVED ARTICHOKEs.**

Greatest and cheapest hog feed on earth. Yield from 500 to 1,000 lbs. per acre. Will raise hogs you cannot afford to grow fat. 65 cents per bushel, \$2.10 for 10 bushels, enough to raise hogs about 100 lbs. We are strong on all Farm and Garden Seeds. Catalog tells all about it. Write. Ask for a poster for your store.

A. A. BERRY, Seed Co., Box 10, Clarinda, Ia.

**Hog's ARTICHOKEs THEMSELVES**

No. 1 for all Stock. Before buying send your name and address. We will send you a sample and culture yield (often 1,000 bu. p. a.) with prices and the rates to all points. Single bu. \$1. Netville Seed Farms, Box 22, Netville, Ill.

**NEVER BOOT HOG TAMER**

Makes nose like cut. Once done always done. Has reversible (T-shaped) steel knobs. Adjustable and self-adjusting to ganges to suit size of hog. Price, prepaid, \$1. W. L. SHORT, P. O. Box 55, Lewiston, Mo.

**The Wolverine HOG RINGER**

is the only really successful ringer made. Easily and quickly attached to all rods, all roofing rings never come off. Send for circulars free. HESEN BRO. & CO., Tecumseh, Mich.

**DIP MOORE'S HOG REMEDY**

and cure Moles and Cancer, kill Lice and Furry Germs, remove Worms and PREVENT CHOLERA, at a cost of FEED Five Cents Per Hog Per Year.

A postal gets particulars and book on "CARE OF HOGS." Address Moore's Co. Stock Yards, Kansas City, Mo.

**BERKSHIRES.**

**LARGE ENGLISH BERKSHIRES** #8 buys a pig of either sex, white or black, of personal in vestigation solicited. Jersey cattle for sale. ERNEST W. WALLACE, Monett, Mo.

**POLAND-CHINAS.**

**BLACK U. S. AND TECUMSEH POLAND-CHINA PIGS** at \$10. Girls bred \$20, that are right. Personal in vestigation solicited. Jersey cattle for sale. ERNEST W. WALLACE, Monett, Mo.

**VIVION & ALEXANDER,**

FULTON, MO.

Breeder of the best stock of Poland-China hogs. Registered Jersey cattle and Plymouth Rock chicks. Young stock for sale at all times.

**POLAND CHINAS**, pedigree and individual merit combined. R. L. ORGAN, Carmi, White Co., Ill.

**POLAND CHINAS**—We have some extra fancy girls of 160 lbs. and some fancy pigs of both sexes of 100 lbs. and up. All colors, black, white, black and color, striped by U. S. King, Prince Hadley and Marks, Winchester. Price \$10.00 to all persons of good standing and satisfactory. A. Spies Breeding Co., St. Jacob, Ill.

**DURCO-JERSEYS.**

**R**OSE HILL Herd of Durco Jersey Hogs. Girls ready to breed and boars ready for service, for sale. Prices reasonable. S. Y. THORNTON, Blackwater, Mo.

**BIG 2 HERDS** Durco Jersey and Chester White Hogs. Top individuals. Price \$10.00 each. J. H. HAYNERS, Ames, Ia.

**Durco Jersey and Berkshire Hogs** Extra. Satisfaction guaranteed or you may return at my expense. S. C. WAGENER, Ames, Ia.

**S. G. RICHARDS**, Sturgow, Boone Co., Mo. Breeds Best Boars of DURCO-JERSEYS. Write for Price.

**DURCO-JERSEYS**—70 head of pigs and sows, bred ready to ship. Satisfaction guaranteed. N. E. BARTTER, CHESTERVILLE, KAN.

**SHROPSHIRE RAMS**, all yearlings, for sale; also my stud ram for sale or trade for one as good. Address L. G. JONES, Towanda, Ill.

**FARMS.**

**GET OUR FREE LIST** of Farm Bargains. S. H. Morton & Co., Gen. Land Agts. Agricultural Alliance, 1515 Filbert St., Philadelphia, Pa.

**CASH FOR YOUR FARM** Residence or Business Property may be sold through us. No fees will be charged for advertising and selling price and least my successful plan. W. H. OSTRANDER, 1515 Filbert St., Philadelphia, Pa.

**160 ACRES** Irrigated Alfalfa land, 400 bearing fruit trees, good house, barn, stock sheds, 60 acres well set out Alfalfa, good orchard, 100 acres pasture, 100 acres woodland, want good climate, comfort and prosperity, try the stock business in Western Kansas, where cane is raised. Also, 100 acres of land, 100 acres of orchard, 100 per cent on capital invested. Farm lands, town property and stocks of merchandise for sale and exchange from Iowa to the Gulf Coast. BOONE & HOPKINS, Birmingham, Iowa.

**Don't Rent**

ESTABLISH A HOME OF YOUR OWN

Read "The Corn Belt," a handsome monthly paper, beautifully illustrated, containing exact and truthful information about farm lands in the West. Send 25 cents in postage stamps for a year's subscription to THE CORN BELT, 20 Adams St., Chicago.

## The Pig Pen.

A TAMWORTH AND POLAND-CHINA CROSS.

It pours readily, put a little salt in it; it aids digestion and is relished more by the pigs. As a substitute for milk I use oil meal, old process, and soak slop for twelve hours. I can get more growth from this mode of feeding than anything I have tried yet. Pigs when being pushed heavily should have lots of exercise.

C. H. DRAKE.

THE VALUE OF BUTTERMILK FOR PIGS.

Editor RURAL WORLD: This "cussin' and discussin'" of pure bred hogs versus cross-bred, line-bred or high-grade hogs participated in by C. D. Lyon, Jim Walker and a host of other "pork growers" from all ends of this great pork-producing world of ours, has at last aroused me from a somewhat lethargic state, and got me pulled into line to give my experience in this business, and I might add most profitable business. I have always been, and am yet, an ardent admirer of Poland-Chinas, not keeping pure-breds, but extremely high grades, selecting the very best gifts for brood sows and using pure-bred boars, and following up this line, have met with results which could please. Being able to market pigs at from  $\frac{1}{2}$  to  $\frac{1}{2}$  months old, at an average weight of from 200 to 225 pounds, fed in the ordinary way of hog feeding as outlined by such papers as the RURAL WORLD, certainly proves the hog-breeding and hog-feeding business to be by no means a bad one; but the banner lot for results has proven to be a cross of a pure-bred Tamworth boar on high-grade Poland-China sows. These were nice, shapely fellows, and of the most quiet and friendly disposition of any lot of pigs it has ever been my lot to handle. Gentleness seems to be a characteristic of the Tamworths, however. The lot mentioned was farrowed June 30 and July 1. The pigs had the run of a large pasture of mixed grass till September, when they were turned on whip-poor-will peas and soy beans and given free and unlimited—congaine, did I say? Nit—the editor forbids even a hint of politics (and "peace be to his ashes" for the same), range of this crop, having had a liberal feed of corn night and morning with shorts slop at noon. They were allowed to suck till the sows weaned them, which was at about three months old. After cleaning up the peats about Oct. 5, when they were put into the feed lot, and fed an exclusive diet of corn until Feb. 5, when they were marketed at the unprecedented weight (with me, understand), of 245 pounds. "Figger" tier age and weights at one pound and who beats it?

E. S. STAYTON.

Cumberland Co., Ill.

SUCCULENT CROPS FOR HOGS.

The hog raiser who expects to get the most out of his business, says A. J. Legg in "Swine Advocate," must plan ahead for his winter feed. The prevailing impression is that corn is almost the only available feed for hogs, especially in the winter. But the hog enjoys a variety of food as well as other animals and will not do well unless he gets it (I mean will not do the best that might be reasonably expected of him).

A few years ago I had a hog penned up in small lot and fed him on corn as is the custom here. I noticed the wind one day blew a dry grape leaf into his pen. He ate once ate it greedily. This set me to thinking and I decided that the hog confined upon a single diet would likely enjoy a change of diet as well as a man. I went to the barn and got a bunch of corn blades and the hogs devoured them greedily. Since that time I have arranged to have a variety of feeds for my hogs.

I plant artichokes for the late winter feed. They are a nourishing and succulent food for hogs, more so than any of the other root and tuber crops, according to the government analysis reported in bulletin No. 22, United States Department of Agriculture. The artichokes do not reach their best until about December, as they do their growing late in the season. In order to have some good feed for my stock from the time when the grass fails until time to feed artichokes I grow pumpkins and turnips. The pumpkins are fed from the time they get ripe as long as they will last, then come the turnips. I pull the large ones and store them away for cattle or other animals, and if convenient the hogs may be turned in to harvest the smaller ones. If not, they are pulled as needed and fed to the hogs. They will not seriously damage when left in the patch until early winter. Then comes the artichokes. The hogs may be turned into the field and allowed to root up the artichokes as they need them. Hogs treated in this way can be wintered well with very little grain, and they will keep in much better health than if wintered upon grain alone. Whenever the habits and requirements of the hog receive as careful attention as other farm animals, by the average farmer, they will prove much more profitable, and there will be less complaint of his being so liable to disease.

PUSHING YOUNG PIGS.

The best food that I have found for pushing young pigs is millet mixed with shorts, placed in a trough close to the pen, where the mother cannot get at it. The little pigs quickly learn it is for them, and as soon as they eat it up good, add a little cornmeal with it, and when three months old I put as much oats ground fine as I have shorts and corn meal. Then soak shelled corn and feed it for slops. Make the slops thick, just so

EDITORIALS

THE KANSAS CITY HOG SHOW.

Frank D. Winn, Secretary of the Managing Committee for the Swine Show to be held in Kansas City next October, submits the following as the classification of Poland-China hogs that will compete for special prizes:

1. Boar and not less than four of his any age or sex.

2. Sow and not less than four of her pigs under six months.

3. Sow and one of her produce any age or sex.

4. Boar and sow any age.

5. Two sows any age or sex produce of same sow.

6. Boar and sow any age.

7. Sow and one of her produce any age or sex.

8. Boar and sow any age.

9. Two sows any age or sex produce of same sow.

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